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EXAMINER

MOORE, IAN N

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,267

Applicant(s)

FACCINN ET AL.

Examiner

Ian N. Moore

Art Unit

2616

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-19, 22 and 24-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8-11, 13-19, 22, 24-28, 30 and 31 is/are allowed.
- 6) ☒ Claim(s) 33-39 is/are rejected.
- 7) ☒ Claim(s) 12, 29 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 3-23-2006.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it contains the phrase, “**invention**” in lines 1 and 10, which can be implied. Applicant is reminded of the proper language and format for an abstract of the disclosure. Correction is required. See MPEP § 608.01(b).

It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The disclosure is objected to because of the following informalities: the status of a parent reference U.S. applications **09/577,152 and 09/636/738** recited in page 1, line 5-10 must be updated as “**now abandoned**”.

Appropriate corrections are required.

Claim Objections

3. Claim 12,29,32,33 and 38 are objected to because of the following informalities:

Claim 12 recites, “a network element” in line 2. It is unclear whether “a network element” is the same as “a first network element” (recited in claim 1, line 7), or “a second network element” (recited in claim 1, line 10).

Claim 29 recites, “The system of claim 254” in line 1. It is suggest to revise as either “claim 25” or “claim 24”.

Claim 32 is also objected for the same reason as stated above in claim 29.

Claim 33 recites, “a first second network elements” in line 3-4. For clarity, it is suggested to insert “and” between “a first” and “second network elements”.

Art Unit: 2616

Claim 38 recites, “**including the charging identification the call records**” in line 8. It is suggest to revise by inserting “in” or equivalent thereof between “the charging identification” and “the call records”.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Kari (WO 97/26739).

Regarding claim 38, Kari discloses a network element for use in coordinating charging information (see FIG. 1, SGSN or GGSN), the network element including:

means to create call records (see page 9, line 15-20; collects charging information) and a charging identification (see col. 9, line 15-34; IMSI ID of MS) for use in one of an application layer network (see FIG. 1, a combined system of near end MS, MSC, GGSN, SGSN, HLR Internet and far end MS, which provides a application layer networking for user equipment) or a transport layer network for a communication network (see FIG. 1, a combined system of near end MS, BSC, MSC, SGSN, GGSN, Internet, and far end MS which provides transport layer networking) having a billing system (see FIG. 1, BC, Billing Center), wherein a first connection is established in the application layer network (see FIG 1, setting up a connection/call in the near

end MS via MSC to far end MS at the application layer) using a call control protocol (see page 5, line 1 to page 6, line 30; establishing connection according to GSM/GPRS PDP context call controlling/managing rule/protocol) and a second connection is established in the transport layer network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two MSs);

to establish a first connection in an application layer network (see FIG 1, setting up a connection/call in the near end MS via MSC to far end MS at the application layer in the GSm/GPRS network; see page 5, line 1-29) and a second connection in a transportation layer network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two MSs; see page 5, lines 1-29);

means to include the charging identification the call records thereof (see page 9, lines 14-35; note that charging information include mobile IMSI ID) and

means for sending said call records to said billing system (see FIG. 1, charging information are sent to BC), for sending said charging identification (see FIG. 1, sending IMSI ID of charging information) from said network element (see FIG. 1, GGSN or SGSN) so as to be used by the further network element (see FIG. 1, BGGSN) in the other one of the application layer network or the transport layer network (see page 9-10, line 30 to page 11, line 10; see FIG. 1, application layer or Transport Layer GPRS network), to enable charging information for the elements to be coordinated (see page 9-10, line 30 to page 11, line 10; BC coordinates/associates the /charging information from GGSN and SGSN nodes);

Regarding claim 39, Kari discloses a network element for use in coordinating charging information (see FIG. 1, BGGSN), the network element being configured for use in one of one of

Art Unit: 2616

the application layer network (see FIG. 1, a combined system of near end MS, MSC, GGSN, SGSN, HLR Internet and far end MS, which provides a application layer networking for user equipment) or transport layer network (see FIG. 1, a combined system of near end MS, BSC, MSC, SGSN, GGSN, Internet, and far end MS which provides transport layer networking) having a billing system (see FIG. 1, BC, Billing Center) for the communication network wherein a first connection is established in the application layer network (see FIG 1, setting up a connection/call in the near end MS via MSC to far end MS at the application layer) using a call control protocol and a second connection is established in the transport layer network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two MSs), said network element being configured to:

means to create call records (see page 9, line 15-20; collects charging information) and a charging identification (see col. 9, line 15-34; IMSI ID of MS) for use in one of an application layer network (see FIG. 1, a combined system of near end MS, MSC, GGSN, SGSN, HLR Internet and far end MS, which provides a application layer networking for user equipment) or a transport layer network for a communication network (see FIG. 1, a combined system of near end MS, BSC, MSC, SGSN, GGSN, Internet, and far end MS which provides transport layer networking) having a billing system (see FIG. 1, BC, Billing Center), wherein a first connection is established in the application layer network (see FIG 1, setting up a connection/call in the near end MS via MSC to far end MS at the application layer) using a call control protocol (see page 5, line 1 to page 6, line 30; establishing connection according to GSM/GPRS PDP context call controlling/managing rule/protocol) and a second connection is established in the transport layer

Art Unit: 2616

network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two MSs);

create call records (see page 9, line 15-20; collects charging information) for said second connection in said transport layer network (see col. 4, lines 19-50; note that charging information is generated at BGGSN in a combined system of near end MS, BSC, MSC, SGSN, GGSN, Internet, and far end MS which provides transport layer networking (see FIG. 1));

send said call records to said billing system (see FIG. 1, BC, Billing Center; sends charging information to BS; see page 9, line 5 to page 11, line 5), and

receives said charging identification from a further network (see FIG. 1, SGSN/GGSN) operable in the other one of the application layer network or transport layer network (see page 9-10, line 30 to page 11, line 10; see FIG. 1, application layer or Transport Layer GPRS network), to enable charging information for the elements to be coordinated (see page 9-10, line 30 to page 11, line 10; BC coordinates/associates the /charging information from GGSN and SGSN nodes).

Second Rejection

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deakin (US006463275B1) and further in view of Cobo (U.S. 6,496,690).

Regarding claim 33, Deakin discloses a user equipment (see FIG. 1, TE, or FIG. 2, MS) for use to coordinate charging information in a communications network including a transport layer network (see FIG. 1, a combined system of near end TE, BSS, SGSN, GGSN, PDN network, and the transport layer of far end TE which provides transport layer networking), an application layer network (see FIG. 1, a combined system of near end TE, MSC/VLR, HLR, and far end TE, which provides a application layer networking for user equipment), a billing system (see FIG. 1, Charging gateway function; or see FIG. 2, a combined system of Billing systems and charging gateway), a first (see FIG. 1, GGSN; see FIG. 3, NE2) and a second network element (see FIG. 1, SGSN, or see FIG. 3, NE1) operable to include a charging identification in their call records (see col. 3, lines 33-36; Call Detailed Records, CDR, includes BCI; see col. 3, lines 29-39; see FIG. 7, note that the each network node records usage is forwarded to the charging gateway; see col. 3, line 30-64; see col. 4, lines 14-55), and means for coordinating charging information using said charging identification included in the call records of said first and second network, the mobile station is adapted:

to establish a first connection in an application layer network (see FIG 1, setting up a connection/call in the near end TE via MSC to HLR, then to far end TE at the application layer) and a second connection in a transportation layer network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two TEs; see FIG. 7, subscriber initiates establishes service for connections; see col. 4, lines 50-54);

to receive the connection message (see FIG. 7, a message) from the first network element in one of the application layer network or the transport layer network (see FIG. 7, subscriber

Art Unit: 2616

receives a connection message from a network node/GGSN in one of Transport or application layer communication; see col. 4, lines 50-54);

to send said information, to the second network element in the other one of the application layer network or transport layer network (see FIG. 7, subscriber transmits a message via SGSN for other one of application or transport layer communication; see col. 4, lines 50-54).

Deakin does not explicitly disclose a call control protocol, a mobile unit receives the charging identification from the first network element; and send said charging identification to the second network element.

However, Cobo teaches a user equipment (see FIG. 1, TE or FIG. 4, MT 15) to establish using a call control protocol (see col. 4, line 35-65; see col. 6, line 30-35; see col. 7, line 43-50; establishing connection according to GSM/GPRS PDP context call controlling/managing rule/protocol), to receive the charging identification (see FIG. 4, Create PDP context Response 84 and subsequent Active PDP context accept response 85; see FIG. 6B, Charging ID of the PDP context message 70) from the first network element (see FIG. 4, GGSN 25) in one of the application layer network (see FIG. 1, a combined system of TE 15, IVR 23, HLR 16, AuC 17, and far end TE over the Internet 26, which provides a application layer networking for user equipment) or the transport layer network (see FIG. 1, a combined system of TE 15, MSC 11, SGSN 12, GGSN 25, PLMN 21, and Internet 26 which provides a transport layer networking; see col. 4, lines 24-35; see col. 5, lines 1-12); and

to send said charging identification (see FIG. 4, activate PDP context request 81 and subsequent create PDP context request 83; see FIG. 5 and 6B, Charging ID of the PDP context

Art Unit: 2616

message 70 and 83), to the second network element (see FIG. 4, SGSN 12); see col. 7, lines 43-59; 64-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a mobile station to send and receive PDP context containing charging ID, as taught by Cobo in the system of Deakin, so that it would provide a standardized method of providing a near real time account balance for subscriber's account and stopping the service when the balance reaches to zero; see Cobo col. 2, line 5-14, 15-56; see col. 3, lines 34-39. Note that by supplying the mobile unit with the charging ID, it will alert the subscriber regarding the account balance in near real time, and it will also benefit the service provider since the service provider can easily terminate the calls as soon as the balance is zero.

Regarding claim 34, the combined system of Deakin and Cobo discloses wherein in the mobile station is adapted to receive the charging identification (Id) created by the first network element in one of the application layer network or the transport layer network as described above in claim 33. Deakin discloses the first network element (GGSN) in one of the application layer network or the transport layer network. In view of this, having the combined system of Deakin and Cobo, then given the teaching of Cobo, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Deakin and Cobo, for the same motivation as described above in claim 33.

Regarding claim 35, the combined system of Deakin and Cobo discloses where in the mobile station is adapted to send to the second network element said received charging identification as described above in claim 33. Cobo further discloses sending an address corresponding to the first network element together with charging information (see FIG. 5 and 6;

Art Unit: 2616

a PDP message comprising SGSN address, GGSN address, and Charging ID; see col. 7, lines 60-67). In view of this, having the combined system of Deakin and Cobo, then given the teaching of Cobo, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Deakin and Cobo, for the same motivation as described above in claim 33.

Regarding Claim 36, Deakin discloses wherein the first network element (see FIG. 1, SGSN/GGSN) provides the charging information to both of the application layer network (see FIG. 1, PDN network) and the transport layer network (see FIG. 1, GRPS network) as described above in claim 1. Deakin further discloses Mobile Station provides the connection messages to both of the application layer network and the transport layer as described above in claim 1.

Deakin does not explicitly disclose the Mobile Station provides the charging identification. However, Cobo discloses the Mobile Station (see Cobo'690 FIG. 4, MT 15) provides the charging identification (see FIG. 5 and 6, Charging Id; see FIG. 4, Steps 81 and 85; note that charging ID is included in the PDP messages which are transmitted and received at the mobile terminal; see col. 7, lines 43-69).

Note that Deakin discloses the mobile unit providing/sending/receiving PDP messages to both application and transport layers. Cobo teaches PDP message comprising charging ID. In view of this, having the system of Deakin, then given the teaching of Cobo'690, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Deakin, by providing a mobile unit with the capability of providing the charging ID, for the same modification as stated above in claim 33.

Regarding claim 37, Deakin a mobile terminal and terminal equipment coupled thereto (see FIG. 1, MT and TE are coupled; see col. 3, lines 15-24).

Regarding claim 38, Deakin discloses a network element for use in coordinating charging information (see FIG. 1, SGSN/GGSN; FIG. 2, NE 1 or NE 2), the network element including:

means to create call records (see col. 3, line 30-35; creating/generating call detailed records) and a charging identification (see col. 4, lines 19-50; BCI, Bill Class Identifier; note that call records and BCI is generated at the NEs when the connection is requested/initiated for billing/charging) for use in one of an application layer network (see FIG. 1, a combined system of near end TE, MSC/VLR, HLR, and far end TE, which provides a application layer networking for user equipment) or a transport layer network for a communication network (see FIG. 1, a combined system of near end TE, BSS, SGSN, GGSN, PDN network, and far end TE which provides transport layer networking) having a billing system (see FIG. 1, Charging gateway function; or see FIG. 2, a combined of Billing systems and charging gateway), wherein a first connection is established in the application layer network (see FIG 1, setting up a connection/call in the near end TE via MSC to HLR, then to far end TE at the application layer) and a second connection is established in the transport layer network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two TEs; see FIG. 7, subscriber initiates request service for connections; see col. 4, lines 50-54);

to establish a first connection in an application layer network (see FIG 1, setting up a connection/call in the near end TE via MSC to HLR, then to far end TE at the application layer) and a second connection in a transportation layer network (see FIG. 1, once the application layer

Art Unit: 2616

is set up a transport layer must be set up and between two TEs; see FIG. 7, subscriber initiates establishes service for connections; see col. 4, lines 50-54);

means to include the charging identification the call records thereof (see col. 3, lines 33-36; note that Call Detailed Records, CDR includes BCI) and

means for sending said call records to said billing system (see col. 3, lines 25-37; note that CDR with BCI is send from NE to a combined charging and billing system), to enable charging information for the elements to be coordinated (see FIG. 7, the combined charging and billing system coordinates/associates the billing/charging information by using BCI included in CDR of the nodes; see col. 3, line 30-64; see col. 4, lines 14-55).

Deakin does not explicitly disclose a call control protocol, means for sending said charging identification from said network element so as to be used by the further network element.

However, a call control protocol is well known in the art in order to establish an end-to-end call. In particular, Cobo teaches a call control protocol (see col. 4, line 35-65; see col. 6, line 30-35; see col. 7, line 43-50; establishing connection according to GSM/GPRS PDP context call controlling/managing rule/protocol), means for sending said charging identification (see FIG. 4, subsequent create PDP context request 83; see FIG. 5 and 6B, Charging ID of the PDP context message 70 and 83) from said network element (see FIG. 4, SGSN 12) so as to be used by the further network element (see FIG. 4, GGSN 25; see col. 3, line 55-65; see col. 7, lines 43-59; 64-67) in the other one of the application layer network or the transport layer network (see FIG. 1, application layer or Transport Layer GPRS network), to enable charging information for elements to be coordinated (see col. 7, line 46 to col. 9, line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a call control send and sending charging ID to GGSN node, as taught by Cobo in the system of Deakin, so that it would provide a standardized method of providing a near real time account balance for subscriber's account and stopping the service when the balance reaches to zero; see Cobo col. 2, line 5-14, 15-56; see col. 3, lines 34-39.

Regarding claim 39, Deakin discloses a network element for use in coordinating charging information (see FIG. 1, SGSN/GGSN; FIG. 2, NE 1 or NE 2), the network element being configured for use in one of one of the application layer network (see FIG. 1, a combined system of near end TE, MSC/VLR, HLR, and far end TE, which provides a application layer networking for user equipment) or transport layer network (see FIG. 1, a combined system of near end TE, BSS, SGSN, GGSN, PDN network, and the transport layer of far end TE which provides transport layer networking) having a billing system (see FIG. 1, Charging gateway function; or see FIG. 2, a combined system of Billing systems and charging gateway) for the communication network wherein a first connection is established in the application layer network (see FIG 1, setting up a connection/call in the near end TE via MSC to HLR, then to far end TE at the application layer) using a call control protocol and a second connection is established in the transport layer network (see FIG. 1, once the application layer is set up a transport layer must be set up and between two TEs; see FIG. 7, subscriber initiates request service for connections; see col. 4, lines 50-54), said network element being configured to:

create call records (see col. 3, lines 30-36; creating/generating Call Detailed Records) for said second connection in said transport layer network (see col. 4, lines 19-50; note that call records is generated at the NEs when the connection is requested/initiated for billing/charging in

Art Unit: 2616

a combined system of near end TE, BSS, SGSN, GGSN, PDN network, and the transport layer of far end TE which provides transport layer networking (see FIG. 1));

send said call records to said billing system (see col. 3, lines 25-37; note that call records are send from NE to Charging gateway so that charging gateway can be used the BCI for billing), and to enable charging information to be coordinated (see FIG. 7, the charging gateway coordinates/associates the billing/charging information by using CDR of the nodes; see col. 3, line 30-64; see col. 4, lines 14-55).

Deakin does not explicitly disclose receives said charging identification from a further network.

However, Cobo teaches receives said charging identification (see FIG. 4, receiving subsequent create PDP context request 83; see FIG. 5 and 6B, Charging ID of the PDP context message 70 and 83) from a further network element (see FIG. 4, SGSN 12); see col. 3, line 55-65; see col. 7, lines 43-59; 64-67) operable in the other one of the application layer network or the transport layer network (see FIG. 1, application layer or Transport Layer GPRS network), to enable charging information for elements to be coordinated (see col. 7, line 46 to col. 9, line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a receiving charging ID from SGSN node, as taught by Cobo in the system of Deakin, so that it would provide a standardized method of providing a near real time account balance for subscriber's account and stopping the service when the balance reaches to zero; see Cobo col. 2, line 5-14, 15-56; see col. 3, lines 34-39.

Allowable Subject Matter

7. Claims 1-6,8-11,13-19,22,24-28,30, and 31 are allowed.
8. Claim 12,29, and 32 are objected to as set forth in paragraph 3, but would be allowable if rewritten to overcome the objections.

Response to Arguments

9. Applicant's arguments with respect to **claims 33-39** have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 33-39, the applicant argued that, "...applicant argued that Deakin does not have first and second network connections...even though Deakin may have two connection, it does not have one connection in transport layer network and another in an application layer network..." in page 10, paragraph 2-3.

In response to applicant's argument, the examiner respectfully disagrees that the argument above. Deakin discloses a mobile station (see FIG. 1, TE; see FIG. 2, MS) initiating a first connection in an application layer network (see FIG 1, setting up a connection/call in the near end TE via MSC to HLR, then to far end TE at the application layer) and a second connection in a transportation layer (see FIG. 1, once the application layer is set up a transport layer must be set up and between two TEs; see FIG. 7, subscriber initiates establishes service for connections; see col. 4, lines 50-54).

Note that it is well established in the art of GSM/GPRS standards that when a user initiates the call/connection, it is initiating a connection in the application layer from a near end user equipment/station to far end user equipment, which is examiner asserts that a first

Art Unit: 2616

connection. Once a first connection between application layer between two stations is set up a transport layer must be set up and between two MSs, otherwise it would very impossible to transmit the call in GPRS standards(see page 5, lines 1-29). Moreover, the prior art reference Forslow (US006608832B2) clearly discloses above well established an application layer connection and transport protocol layer connection in the GPRS network (see FIG. 3,5,7; entire patent). Thus, it is clear that Deakin clearly discloses the argued limitation.

Regarding claims 33-39, the applicant argued that, “...There is no simple indication that the GGSN or SGSN generates the BCI...This does not indicate the NE2 generates the BCI... While Deakin does not send the BCI to the charging gateway and the billing system...” in page 10, paragraphs 4-5; page 11, paragraph 3.

In response to applicant's argument, the examiner respectfully disagrees that the argument above.

Deakin discloses generating a charging identification (see col. 4, lines 19-50; BCI, Bill Class Identifier) in a first network element (see FIG. 1, GGSN or SGSN; see FIG. 2, NE2; see col. 3, lines 24-33; note that BCI is generated at the NEs when the connection is requested/initiated for billing/charging). Deakin's col. 3, line 34-36 discloses as follows:

The network element NE2 passes call detail records (CDRs) with billing class identifiers (BCI) to a charging gateway, which directs CDRs having appropriate billing class identifiers (in this example with BCIs of 1, 2 and 3) to respective billing systems (shown as A, B and C)...(Emphasis added)

Thus, by viewing FIG. 2 and as set forth above, one can clearly see that NE 1 and NE 2 (i.e. GGSN and SGSN) “generate” BCI.

Regarding claims 33-39, the applicant argued that, "...BCI is not used to coordinate charging information between a transport layer network and a application layer network ... " in page 11, paragraph 4-5.

In response to applicant's argument, the examiner respectfully disagrees the argument above. Deakin discloses coordinating charging information in the communications network using said charging identification included in the call records of said first and second network elements (see FIG. 7, note that the NE1 and NE2 records usage is forwarded to Charging gateway function (see FIG. 1) or a combined system of Billing systems and charging gateway charging gateway (see FIG. 2), the combined charging and billing systems coordinates/associates the billing/charging information by using BCI included in CDR for each NE; see col. 3, line 30-64; see col. 4, lines 14-55). Regarding response on transport layer and application layer networks, please see the above response. Thus, it is clear that the BCI is used to coordinate charging information between transport layer and application layer network.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

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